

CLAIMS

What is claimed is:

- 5        1. In a digital television system, a method of displaying information comprising the steps of:
  - a) maintaining an intelligent filter that records hypertext documents that were previously accessed by a viewer of said digital television system;
  - b) monitoring datacast information decoded from a digital television
- 10      broadcast signal to identify newly received hypertext documents;
  - c) storing into a cache memory any of said newly received hypertext documents that are recorded in said intelligent filter;
  - d) receiving, from a viewer, an identifier of a selected hypertext document; and
- 15      e) provided said selected hypertext document is located within said cache memory, accessing said selected hypertext document from said cache memory and displaying said selected hypertext document on a display screen of said digital television system.
- 20      2. A method as described in Claim 1 wherein said datacast information comprises a domain of hypertext documents that are periodically broadcast.
- 25      3. A method as described in Claim 2 further comprising the step of f) provided said selected hypertext document is not located within said cache memory, obtaining said selected hypertext document upon its next occurrence

within said datacast information and displaying said selected hypertext document on said display screen of said digital television system.

4. A method as described in Claim 2 further comprising the step of f)  
5 provided said selected hypertext document is not located within said cache memory, obtaining said selected hypertext document from a digital modem coupled to the word wide web and displaying said selected hypertext document on said display screen of said digital television system.

10 5. A method as described in Claim 1 wherein said step a) comprises the steps of:

a1) receiving and recording identifiers of hypertext documents accessed by said viewer;  
a2) recording a count associated with each identifier received by said  
15 step a1), said count indicating the number of times each recorded hypertext document was accessed by said viewer; and  
a3) ranking said identifiers of said intelligent filter based on their associated counts.

20 6. A method as described in Claim 5 wherein said step a) further comprises the step of a4) removing from said intelligent filter any recorded identifier of a hypertext document that has not been accessed by said viewer for a predetermined time period.

25 7. A method as described in Claim 1 wherein said hypertext documents are web pages and wherein said identifiers and web page addresses.

8. A method as described in Claim 1 wherein said step b) comprises the steps of:

- b1) tuning a tuner to a selected channel within said digital television
- 5 broadcast signal and receiving datacast information therefrom for a time period;
- b2) identifying newly received hypertext documents from said datacast information of said step b1);
- b3) provided said time period expired, updating said selected channel and initializing said time period; and
- 10 b4) repeating said steps b1) - b3).

9. In a client-side digital television system, a method of displaying information comprising the steps of:

- a) maintaining an intelligent filter that records hypertext documents
- 15 based on the frequency that hypertext documents were previously accessed by a viewer of said digital television system;
- b) monitoring datacast information decoded from a received digital television broadcast signal to identify newly received hypertext documents, said step b) comprising the steps of:
- 20 b1) sequentially scanning a first tuner of said digital television system over channels of said digital television broadcast signal for a predetermined time period for each scanned channel; and
- b2) at each scanned channel, identifying newly received hypertext documents;
- 25 c) storing into a cache memory any of said newly received hypertext documents that are recorded in said intelligent filter;

d) receiving, from a viewer, an identifier of a selected hypertext document; and

e) provided said selected hypertext document is located within said cache memory, accessing said selected hypertext document from said cache memory and displaying said selected hypertext document on a display screen of said digital television system.

5           10. A method as described in Claim 9 further comprising the step of f) using a second tuner of said digital television system to display contents of a  
10 selected channel to said viewer on said display screen.

15           11. A method as described in Claim 10 wherein said datacast information comprises a domain of hypertext documents that are periodically broadcast.

12. A method as described in Claim 10 further comprising the step of f) provided said selected hypertext document is not located within said cache memory, obtaining said selected hypertext document upon its next occurrence within said datacast information and displaying said selected hypertext  
20 document on said display screen of said digital television system.

25           13. A method as described in Claim 10 further comprising the step of f) provided said selected hypertext document is not located within said cache memory, obtaining said selected hypertext document from a digital modem coupled to the word wide web and displaying said selected hypertext document on said display screen of said digital television system.

14. A method as described in Claim 10 wherein said step a)  
comprises the steps of:

a1) receiving and recording identifiers of hypertext documents accessed  
by said viewer;

5 a2) recording a count associated with each identifier received by said  
step a1), said count indicating the number of times each recorded hypertext  
document was accessed by said viewer;

a3) ranking said identifiers of said intelligent filter based on their  
associated counts; and

10 a4) removing from said intelligent filter any recorded identifier of a  
hypertext document that has not been accessed by said viewer for a  
predetermined time period.

15. A method as described in Claim 10 wherein said hypertext  
documents are web pages and wherein said identifiers and web page  
addresses.

16. A digital television system comprising:

a display screen;

20 a tuner coupled to receive a digital television broadcast signal;  
an intelligent controller coupled to said display screen and coupled to  
said tuner, said intelligent controller comprising a processor coupled to a bus  
and a memory unit containing instructions that when executed implement a  
method of displaying information comprising the steps of:

25 a) maintaining an intelligent filter that records hypertext documents  
that were previously accessed by a viewer of said digital television  
system;

- b) monitoring datacast information decoded from said digital television broadcast signal to identify newly received hypertext documents;
  - c) storing into a cache memory any of said newly received hypertext documents that are recorded in said intelligent filter;
  - 5 d) receiving, from a viewer, an identifier of a selected hypertext document; and
  - e) provided said selected hypertext document is located within said cache memory, accessing said selected hypertext document from
- 10 said cache memory and displaying said selected hypertext document on said display screen.

17. A digital television system as described in Claim 16 wherein said datacast information comprises a domain of hypertext documents that are  
15 periodically broadcast.

18. A digital television system as described in Claim 17 wherein said method further comprises the step of f) provided said selected hypertext document is not located within said cache memory, obtaining said selected  
20 hypertext document upon its next occurrence within said datacast information and displaying said selected hypertext document on said display screen.

19. A digital television system as described in Claim 17 wherein said method further comprises the step of f) provided said selected hypertext  
25 document is not located within said cache memory, obtaining said selected hypertext document from a digital modem coupled to the word wide web and displaying said selected hypertext document on said display screen.

20. A digital television system as described in Claim 16 wherein said step a) comprises the steps of:

- a1) receiving and recording identifiers of hypertext documents accessed by said viewer;
- 5 a2) recording a count associated with each identifier received by said step a1), said count indicating the number of times each recorded hypertext document was accessed by said viewer; and
- 10 a3) ranking said identifiers of said intelligent filter based on their associated counts.

21. A digital television system as described in Claim 20 wherein said step a) further comprises the step of a4) removing from said intelligent filter any recorded identifier of a hypertext document that has not been accessed by said viewer for a predetermined time period.

22. A digital television system as described in Claim 16 wherein said hypertext documents are web pages and wherein said identifiers and web page addresses.

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23. A digital television system as described in Claim 16 wherein said step b) comprises the steps of:

- b1) tuning said tuner to a selected channel within said digital television broadcast signal and receiving datacast information therefrom for a time period;
- 25 b2) identifying newly received hypertext documents from said datacast information of said step b1);

- b3) provided said time period expired, updating said selected channel and initializing said time period; and
- b4) repeating said steps b1) - b3).